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DOCKET NO. 99-B-186 (STMI01-99186)
SERIAL NO. 09/591,621
PATENT

REMARKS

Claims 1-29 are pending in this application.

Claims 1-29 have been rejected.

Claims 1, 8 and 22 has been amended herein as helpfully suggested by the Examiner.

Reconsideration and full allowance of Claims 1-29 are respectfully requested.

REJECTION UNDER 35 U.S.C. § 102

In Section 5 of the June 6, 2006, Office Action the Examiner rejected Claims 1-29 under 35 U.S.C. § 102(b) as being anticipated by *Giorgi et al.*, "An Educational Environment for Program Behavior Analysis and Cache Memory Design" ("Giorgi"). This rejection is respectfully traversed.

A prior art reference anticipates the claimed invention under 35 U.S.C. § 102 only if every element of a claimed invention is identically shown in that single reference, arranged as they are in the claims. MPEP § 2131, p. 2100-76 (8th ed., rev. 4, October 2005) (*citing In re Bond*, 910 F.2d 831, 832, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990)). Anticipation is only shown where each and every limitation of the claimed invention is found in a single prior art reference. *Id.* (*citing Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987)).

The *Giorgi* reference describes an educational software package (Csim) used as a teaching tool in a computer architecture course. (See Page 1243, left column, 2nd para.). A user of Csim may build a program and execute the program on an instruction set simulator to produce a trace file of

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the memory accesses performed by the program during its simulated execution. (See *Page 1244, left column, 3rd para.*). The trace file then provides input data for analysis tools that allow the user to analyze the performance of the program on one or more specified system architectures. (See *Page 1244, left column, 5th para., through right column, 2nd para.*).

Claim 1 requires a memory access monitor that monitors, during simulated execution of a program, memory accesses by the program to a simulated memory space. This is in distinct contrast to the educational software package of the Giorgi reference, which creates a trace file during simulated program execution, then analyzes the trace file after the simulation has completed.

The Examiner's response confuses Giorgi's teachings. As the Examiner notes, Giorgi does indeed teach that "the student traces the execution of the cjpeg program." Giorgi also describes generating the trace file on page 1244, left column, paragraphs 2 and 3, and in Figure 1, as "TRACE". Generating this trace file could at least arguably correspond to the claimed "a memory access monitor capable of monitoring, during said simulated execution of said program, memory accesses to a simulated memory space...", if one assumes that "monitoring" is the same as "recording".

But claim 1 also requires that "said memory access monitor is capable of generating memory usage statistical data associated with said monitored memory accesses, and wherein said memory accesses comprise read operations and write operations". Giorgi does not teach or suggest that the trace program is capable of doing this at all. Giorgi teaches that analysis can be performed on the trace file after the execution, but not that memory usage statistical data can be generated by a memory access monitor during simulated execution. In fact, Giorgi describes that these are

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completely different phases – a trace file is generated during a “program development” phase, and any analysis is done during a “program behavior analysis” phase, a “system behavior analysis” phase, or a “performance analysis” phase. *Figure 1, page 1244, left column paragraph 2 – right column paragraph 1.*

Giorgi does not in any way teach or suggest a memory access monitor as in claim 1,

that is both

- capable of monitoring, during said simulated execution of said program, memory accesses to a simulated memory space; and
- capable of generating memory usage statistical data associated with said monitored memory accesses, and wherein said memory accesses comprise read operations and write operations.

For these reasons, the Office Action does not establish that the Giorgi reference anticipates the Applicant’s invention as recited in amended independent Claim 1 (and its dependent claims). For similar reasons, the Giorgi reference fails to anticipate the Applicant’s invention as recited in amended independent Claims 8 and 22 (and their dependent claims). Accordingly, the Applicant respectfully requests withdrawal of the § 102 rejection and full allowance of Claims 1-29.

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SUMMARY

If any issues arise, or if the Examiner has any suggestions for expediting allowance of this application, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at wmunck@munckbutrus.com.

The Commissioner is hereby authorized to charge any additional fees connected with this communication (including any extension of time fees) or credit any overpayment to Deposit Account No. 50-0208.

Respectfully submitted,

MUNCK BUTRUS P.C.

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